Applicants: Iva Greenwald and Diane Levitan

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-46. (canceled)
- 47. (currently amended) A method for determining whether a compound is capable of ameliorating Alzheimer's diseasean agent increases presentlin activity comprising (a) treating introducing the agent to a transgenic Caenorhabditis elegans animal, mutants having reduced, increased or altered sel-12 activity with the compound wherein the animal exhibits an egg-laying defective (Egl) phenotype induced by partial or total loss of SEL-12 protein activity; (b) determining whether the compound agent rescues suppresses, enhances or has no effect on the Egl phenotype, of the mutant, the suppression or enhancement of the phenotype indicating that the compound is capable of ameliorating Alzheimer's diseasesuch rescue indicating that that agent increases presenilin activity.
- 48. (currently amended) A—The method of claim 47, wherein the transgenic Caenorhabditis elegans mutant to be treated is comprises the sel
 12(ar171)allele(ATCC Accession No. 97292).

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49. (currently amended) A The method of claim 47, wherein the transgenic Caenorhabditis elegans mutant to be treated is comprises the sel-12(ar131) allele(ATCC Accession No. 97293).

50-86. (canceled)